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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,960	09/29/2003	Peter Bier	PO-7879/LeA 35,783	3802

157 7590 10/03/2005

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EXAMINER	
MOORE, MARGARET G	

ART UNIT	PAPER NUMBER
1712	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/673,960	BIER ET AL.	
	Examiner	Art Unit	
	Margaret G. Moore	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 to 31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 to 31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 to 12 and 14 to 31 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 28 of copending Application No. 10/673,906. Although the conflicting claims are not identical, they are not patentably distinct from each other because the process in claim 23 of '906 overlaps with the process in instant claim 1. Note that steps (a) and (b) are the same. Instant step (c) is embraced by the process in claim 23 of '906; see claim 27 which specifically teaches this step. Instant step (d) is met by step (c) in '906. See instant claim 23 which teaches this topcoating composition. The limitations of instant claims 2, 3, and 5 to 7 are rendered obvious by claims 3 to 7 in '906. Claim 8 is met by claim 27. Claim 4 is embraced by the silane in claim 1 of '906. Reading the claims of '906 in light of the specification, as one must do, it is clear that the scratch resistant layer embraces layers having epoxy silanes (see page 11 of the instant specification). The limitations of instant claims 10 to 12, and 21 represent obvious optimizations and/or inherent physical properties of the flame or corona treatment. Claims 15 and 16 are met by claims 20 and 21 in '906. The limitations of claims 17 to 19 are met by claims 24, 25 and 28 in '906. For claim 22 see claim 12 in '906. Claims 23 to 27 are rendered obvious by claims 1, 9, 17 and 18. Claim 30 is met by claim 26 in '906.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 32 of copending Application No. 10/700,750. Although the conflicting claims are not identical, they are not patentably distinct from each other because the process of claims 27 to 29 (including the limitations of claim 1, from which claim 27 depends) meet each of the claimed process steps of instant claim 1. The Examiner realizes that claims 27 to 32 of '750 are withdrawn from consideration as a result of a restriction requirement, but since these claims are still pending, this rejection is appropriate. Since the product of claim 1 is prepared by the process of claim 27, the claims depending upon claim 1 can be used to further define the breadth of process claim 27. Thus instant claims 2 - 7 are rendered obvious by claims 5 to 9 in '750. Claims 9 to 13 are obvious optimizations of the limitation of claim 29. Instant claims 15 and 16 are suggested by claims 19 and 20 in '750. Claims 17 and 18 are met by claims 30 and 32 in '750. For claim 19, the addition of a flow control agent, in an effort to obtain the known benefits and properties thereof, to the composition in the process of claim 27 in '750 would have been obvious to the skilled artisan. Claims 20, 22 to 27 are suggested by the limitations in claims 10 to 13 of '750. Claim 21 is suggested by claim 25. With regard to the humidity limitation of claim 30, the Examiner notes that this range is within that which the skilled artisan would consider ambient. In lack of any specific humidity range in claim 27, one would assume ambient conditions and this renders obvious the instantly claimed range.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1 to 6, 8, 14 to 18, 20 to 27 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 199 52 040 (published May 3, 2001) in view of the English language equivalent Mennig et al., herein Mennig.

Mennig teaches a substrate comprising an abrasion resistant layer. Specifically the substrate comprises a hard base layer having thereon a topcoat. See for instance the abstract. Column 2, starting on line 30, defines the hard base layer which is prepared from a sol gel comprising a silane condensate and an inorganic particle. The silanes are taught starting on column 3, line 25 through column 4, and embrace the limitations of claims 2 and 4 to 6. See specifically lines 17 to 20 of column 4 and line 51 of column 3. Note too the preferred nanoparticle on column 8, line 31. The amount of nanoparticle taught on column 2, line 40, meets claim 3. In this manner Mennig teaches the required process steps (a) and (b). The top of column 12 teaches that after complete cure (claim 8) the basecoat is subjected to flame, plasma or corona treatment. This meets instant step (c). Finally, a top coat composition is applied. See column 12, lines 32 and on. Particular attention is drawn to column 13 which teaches various top coat compositions prepared from a silane. These compositions meet the requirement of claims 20 and 22 to 27. As such Mennig anticipate each step required in instant claim 1, as well as the specific claims noted supra.

Column 11, lines 20 to 25, teaches claim 14 while lines 45 to 49 teach claims 15 and 16. See the working examples, column 14, which apply a primer meeting claim 17 and curing conditions meeting claim 18. The haze limitation of claim 21 is found on column 14, line 38.

7. Claims 9, 11 to 13, 19 and 28 to 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mennig.

Regarding claims 9 and 11 to 13 the Examiner notes that Mennig do not teach the specific plasma, corona or flame treatment conditions. As such the skilled artisan would have been motivated to select treatment conditions that are known in the art. Applicants admit on page 5 of their specification that these conditions are generally known in the art. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (i.e. does not require undue experimentation).

For claims 19 and 28, see column 6, line 38, which teaches the addition of leveling agents, which meet the flow control agent claimed. Determining the operable amount of leveling agents, in an effort to obtain the properties and benefits thereof, would have been obvious to one having ordinary skill in the art. As such the skilled artisan would have found these claims obvious.

For claim 30, adjusting the humidity in an effort to adjust and/or optimize the cure results would have been obvious. On one hand, this humidity level overlaps with what the skilled artisan would consider to be ambient humidity and, in the lack of any specific teaching, ambient humidity would have been selected to the skilled artisan. This render the selection of such a humidity range obvious.

Finally, for claim 29, the Examiner notes that the skilled artisan would have been motivated to adjust the viscosity of the coating composition such that it falls within a desirable range for optimum coating ability and properties. Note too that column 7 teaches that the viscosity of the coating can be adjusted. While this teaching specifies the sol gel, the skilled artisan would have realized that the viscosity of the top coating could be adjusted in a comparable manner for a desired coating composition.

8. Claim 10 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mennig.

This reference does not teach a adhesion energy value, although column 14, line 35, teaches that the adhesion is very good. However the process claimed is fully met by the teachings in Mennig. Where applicant claims a composition (in this instance the scratch resistant and topcoat layers) in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection, under the basis that the claimed property will inherently be the same in the prior art as claimed. The basis for this inherency position is the fact that the prior art is the same as the claims.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
9/29/05